

REMARKS

Please reconsider this application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 60-69 are currently pending in this application. Claim 60 is independent. The remaining claims depend, directly or indirectly, from claim 60.

Amendments to the Claims

Claim 60 has been amended to require "one of first and second electrode bodies being connected with [an] electric power source, the other of said first and second electrode bodies being electrically grounded." Claim 60 has been further amended to clarify the "cruciform directions" to "one side direction orthogonal to said longitudinal direction." Claim 60 has also been amended to clarify that the gas passage required by the preamble is "a space extending in a longitudinal direction ... said space allowing said processing gas to pass along said passage direction in said space, said processing gas being plasmatized in said space, said space being provided as said gas passage." Finally, various other minor amendments have been made to claims 60, 61, and 62 in order to reflect the above amendments. No new matter has been added by way of these amendments, because support may be found, for example, in paragraph [0128] and Figures 16, 28, 29, 30, and 32.

Rejection(s) under 35 U.S.C. § 112

Claims 60-69 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as

the invention. To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

The Examiner asserts that claim 60 omits the structural relationship between the claimed "open direction of the cruciform directions" and the remaining elements. As amended, claim 60 now recites "one side direction orthogonal to said longitudinal direction." Applicant believes that this amendment clarifies the relationship between the two claimed directions. The Examiner further asserts that there is insufficient antecedent basis "said gas passage" claimed in claim 60. Claim 60 requires a gas passage in the preamble, and, as amended, further requires "a space extending in a longitudinal direction ... said space allowing said processing gas to pass along said passage direction in said space, said processing gas being plasmatized in said space, said space being provided as said gas passage." Applicant believes that the preamble provides sufficient antecedent basis for "said gas passage," and that the amendment clarifies the relationship between the gas passage and the remaining claimed elements. For the reasons set forth above, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 102

Claims 60-62, 65, 66, and 69 stand rejected under 35 U.S.C. § 102(a, e) as being anticipated by U.S. Publication No. 2003/0129107 ("Denes"). To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

As a preliminary matter, Applicant respectfully notes that Denes' element 406 corresponds to an "electrode member," and element 416 corresponds to an "insulating layer." In certain instances in the Office Action, it appears that references to these two elements are inconsistent. Further, it is unclear whether Examiner considers Denes' element 406 or element

402 to be the "first electrode body" required by the claimed invention, because element 416, an "insulating layer" is labeled as the "first electrode body." For the purposes of this reply, Applicant assumes that Examiner considers element 406 to be the "first electrode body."

Independent claim 60 specifically recites that the electrode structure comprises "a first electrode body," "a second electrode body," and "a dielectric first case body." These elements extend in a longitudinal direction in parallel (*see* Figures 15, 19, and 28 of the specification). The longitudinal direction in which each of the aforementioned components extends is orthogonal to an arranging direction in which the two electrode bodies are arranged and also orthogonal to a passage direction in which a processing gas is passed between the two electrode bodies. The dielectric first case body is formed a cross-section orthogonal to the longitudinal direction into a U-shape having a first opening, where the first opening is opened toward one of the cruciform directions orthogonal to the longitudinal direction of extension.

Further, the first electrode body is received in the dielectric first case body. An outer first surface of the first electrode body is contacted with an inner peripheral surface of the dielectric first case body. An end part of a side of the first opening of the dielectric first case body is protruded in the open direction relative to the first electrode body. A space extending in a longitudinal direction allows said processing gas to pass along the passage direction in the space, thereby forming a gas passage. The second electrode body is disposed outside of the dielectric first case body without aiming toward the first opening. Denes fails to show or suggest at least the elongate dielectric first case body and the end part required by claim 60.

With respect to the elongate first dielectric case body, claim 60 requires "an elongate dielectric first case body extending in said longitudinal direction in parallel with said first and second electrode bodies, said first case body being formed a cross section orthogonal to

said longitudinal direction into a U-shape so that said first case body has a first opening which is opened toward one side direction orthogonal to said longitudinal direction" (see, 57a, Figure 15), and "said first electrode body [is] received in said dielectric case body so that said first surface is contacted with an inner peripheral surface of said first case body." The Examiner asserts that Denes discloses an elongate first dielectric case body (406+422+416), and "insulating layer" 416 extends in a U-shape into Figure 4. However, in this arrangement, the inner peripheral surface of the insulating layer 416 cannot contact a first surface of the electrode body because it faces the gas passage 408. Further, it is improper to include 422 because it is clearly shown to be a separate element from insulating layer 416 and electrode body 406. Therefore, Denes fails to show or suggest the above discussed limitation of claim 60 requiring that a surface of the first electrode "is contacted with an inner peripheral surface of said first case body."

With respect to the end part, claim 60 requires "an end part on a side of said first opening of said first case body being protruded in said one side direction relative to said first electrode body." The Examiner asserts that Denes' insulating layer 422 corresponds to this end part. As discussed above, it is improper to consider the combination of the two insulating layers 444, 416 and the electrode body 406 to be the first case body. Therefore, if electrode body 406 is considered to be the "first electrode body," insulating layer 422 cannot be the claimed end part. Further, if electrode body 402 is considered to be the first electrode body, then the first case body discussed above is improper because it does not contact the first electrode body. Therefore, Denes also fails to show or suggest the end part required by claim 60.

In view of the above, because Denes fails to disclose each of the elements of amended independent claim 60, claim 60 is patentable over Denes. Dependent claims 62, 65,

66, and 69 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

Claims 62-66 and 69 stand rejected under 35 U.S.C. § 103(a) as being obvious over Denes in view of U.S. Patent No. 5,500,256 ("Watabe").

As described above, Denes fails to teach or suggest the limitations of amended independent claim 60. Further, Watabe fails to supply that which Denes lacks, as evidenced by the fact that Watabe is relied upon by the Examiner solely for the purpose of teaching that the dielectric first case body and the dielectric second case body are separately formed and that the dielectric first case body has an opposing surface abutted with said second dielectric case body, where the opposing surface is provided with a reserve to serve as the gas passage. In fact, Watabe is completely silent with respect to the claimed first dielectric case body, first electrode body, and end part discussed above. In view of the above, it is clear that amended independent claim 60 is patentable over Denes and Watabe, whether considered separately or in combination. Further, dependent claims 62-66 and 69 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 67 and 68 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Denes in view of Watabe, in further view of U.S. Patent No. 6,137,231 ("Anders"). To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

As described above, Denes and Watabe fail to teach or suggest the limitations of amended independent claim 60. Further, Anders fails to supply that which Denes and Watabe

lack, as evidenced by the fact that Anders is relied upon by the Examiner solely for the purpose of teaching a plate defining the gas passage, where the thickness of the plate varies along the direction of the gas passage, and wherein a distance between the first electrode body and the second electrode body varies along the direction of the gas passage (*see* Office Action mailed August 8, 2007, page 9). In fact, Anders is completely silent with respect to the claimed first dielectric case body, first electrode body, and end part discussed above. In view of the above, it is clear that amended independent claim 60 is patentable over Denes, Watabe, and Anders, whether considered separately or in combination. Further, dependent claims 62-66 and 69 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

In view of the above, it is clear that amended independent claim 60 is patentable over Denes, Watabe, and Anders, whether considered separately or in combination. Further, dependent claims 67 and 68 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 12088/019001).

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Respectfully submitted,

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